

[Manuals.plus](#) /

› [Kärcher](#) /

› Kärcher BP 2 Cisterna Submersible Pressure Pump User Manual

Kärcher 1.645-420.0

Kärcher BP 2 Cisterna Submersible Pressure Pump User Manual

Model: 1.645-420.0

1. PRODUCT OVERVIEW

The Kärcher BP 2 Cisterna submersible pressure pump is engineered for efficient garden irrigation utilizing alternative water sources such as rainwater, wells, or springs. This allows for the conservation of valuable drinking water. The pump features a robust construction with a stainless steel housing, threaded fitting, and a durable stainless steel carry handle. Key features include an integrated pre-filter to protect against debris and a float switch that automatically activates or deactivates the pump based on water levels, preventing dry running. The connection height is adjustable for versatile installation. A hose connection set for 0.75-inch and 1-inch hoses, along with a built-in check valve, are included for convenient setup.



Figure 1.1: Kärcher BP 2 Cisterna Submersible Pressure Pump with included accessories.

2. SAFETY INSTRUCTIONS

Always adhere to the following safety guidelines to prevent injury or damage to the pump:

- **Electrical Safety:** Ensure the power supply matches the pump's voltage (230 Volts). Do not operate the pump with damaged cables or plugs. Always disconnect power before handling or servicing the pump.
- **Water and Submersion:** The pump is designed for submersion in water. Do not operate it dry. Ensure proper sealing of all connections to prevent leaks.
- **Installation:** Securely suspend the pump using the provided rope or handle. Do not use the power cable to lift or lower the pump.
- **Children and Pets:** Keep children and pets away from the operating pump and water source.
- **Maintenance:** Only perform maintenance tasks as described in this manual. For complex repairs, contact authorized service personnel.

3. PACKAGE CONTENTS

Verify that all components are present upon unpacking:

- Kärcher BP 2 Cisterna Submersible Pressure Pump
- Integrated Check Valve
- Stainless Steel Threaded Pump Housing and Fitting
- 1-inch and 3/4-inch Hose Connecting Element with Hose Clamp
- Float Switch
- Stainless Steel Heavy Duty Carry Handle
- Integrated Pre-Filter
- 10 meters of rope for suspension





Figure 3.1: Front and side views of the Kärcher BP 2 Cisterna packaging.

4. SETUP AND INSTALLATION

Follow these steps for proper installation of your submersible pump:

1. **Choose Location:** Select a suitable location within a well, cistern, or other water reservoir. Ensure the pump can be fully submerged and has adequate clearance.
2. **Attach Hose:** Connect your garden hose (0.75-inch or 1-inch) to the pump's outlet using the provided hose connecting element and hose clamp. Ensure a tight, leak-free connection.
3. **Adjust Float Switch:** The float switch controls the pump's automatic operation. Adjust its position to define the minimum and maximum water levels for pump activation and deactivation. This protects the pump from running dry.



Figure 4.1: Illustration of the float switch's operational range.

4. **Lower the Pump:** Use the stainless steel carry handle and the included 10-meter rope to carefully lower the pump into the water source. Ensure the pump rests on a stable surface or is suspended securely. A spacer foot is included for installation aid.



Figure 4.2: Proper handling and placement of the pump during installation.

5. **Connect Power:** Plug the pump into a grounded 230 Volt power outlet. The pump is now ready for operation.

5. OPERATING INSTRUCTIONS

The Kärcher BP 2 Cisterna pump is designed for straightforward operation:

- **Automatic Operation:** Once connected to power and submerged, the pump will automatically start when the water level rises above the float switch's activation point and stop when it falls below the deactivation point. This ensures efficient water usage and protects the pump from damage due to low water levels.
- **Manual Operation (if applicable):** While primarily automatic, ensure the float switch is positioned to allow the pump to operate as needed for your irrigation requirements.
- **Water Source:** The pump is optimized for drawing water from cisterns, wells, and other alternative water sources for garden irrigation.
- **Performance:** The pump can drain water from depths up to 7 meters and pump to a height of up to 32 meters, with a maximum flow rate of 5,700 liters per hour.



Figure 5.1: The Kärcher BP 2 Cisterna pump in operation, drawing water from a cistern for garden use.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your pump:

- **Pre-Filter Cleaning:** Periodically inspect and clean the integrated pre-filter to prevent blockages and maintain efficient water flow. Disconnect power before cleaning.
- **Hose and Connection Check:** Regularly check all hose connections for leaks or damage. Ensure the hose clamp is secure.
- **Pump Housing Inspection:** Although made of durable stainless steel, inspect the pump housing for any signs of damage or wear.
- **Winterization:** In regions with freezing temperatures, remove the pump from the water source before the first frost. Drain all water from the pump and hoses to prevent damage from freezing. Store the pump in a dry, frost-free location.

7. TROUBLESHOOTING

If you encounter issues with your Kärcher BP 2 Cisterna pump, consider the following common solutions:

Problem	Possible Cause	Solution
Pump does not start.	No power supply; Float switch not activated; Motor overload.	Check power connection and circuit breaker. Adjust float switch position. Allow pump to cool down if overheated.
Low flow rate or no water.	Pre-filter clogged; Hose kinked or blocked; Water level too low; Air in pump.	Clean pre-filter. Check hose for obstructions. Ensure sufficient water level. Briefly lift and lower pump to release trapped air.
Pump runs continuously.	Float switch stuck in "on" position; Leak in hose or connections.	Check float switch for free movement. Inspect all connections for leaks and tighten as necessary.

If the problem persists after attempting these solutions, please contact Kärcher customer support.

8. SPECIFICATIONS

Attribute	Value
Brand	Kärcher
Model Number	1.645-420.0
Power Source	Power grid
Voltage	230 Volts
Wattage	800 watts
Maximum Flow Rate	5,700 Liters Per Hour
Maximum Lifting Height	32 Meters
Submersion Depth	Up to 7 meters
Material	Stainless Steel
Product Dimensions (L x W x H)	5.12" x 5.12" x 18.7" (130 x 130 x 475 mm)
Item Weight	22.6 pounds (10.29 Kilograms)
Hose Connection	G1 splice thread, 1" and 3/4" hose connecting element

9. WARRANTY AND SUPPORT

Kärcher stands behind the quality of its products. For specific warranty details, please refer to the documentation included with your purchase or visit the official Kärcher website. In general, products purchased through Amazon may be eligible for a 30-day return policy.

For technical assistance, spare parts, or service inquiries, please contact Kärcher customer support:

Kärcher Official Website: www.kaercher.com

Customer Service: Refer to the contact information on the Kärcher website for your region.

